

WHAT IS CLAIMED IS:

1. An apparatus for trapping a micro-object, comprising:
a base;
a gripping mechanism for gripping a micro-object in a droplet placed in a predetermined location on said base; and
a trapping mechanism for trapping the micro-object gripped by said gripping mechanism.
2. The apparatus as recited in Claim 1, further comprising a lifting means on said base for separating from the droplet the micro-object gripped by said gripping mechanism and trapped by said trapping mechanism.
3. The apparatus as recited in Claim 1, further comprising a means on said base for observing and displaying the trapped condition of the micro-object.
4. An apparatus for trapping a micro-object, comprising:
a base;
a gripping mechanism for gripping a micro-object in a droplet placed in a predetermined location on said base; and
a trapping mechanism for trapping the micro-object gripped by said gripping mechanism;
wherein said trapping mechanism includes a trapping means for trapping the micro-object, a moving means for moving said trapping means and an installation means for installing said trapping means on said moving means.
5. The apparatus as recited in Claim 4, further comprising a lifting means on said base for separating from the droplet the micro-object gripped by said gripping mechanism and trapped by said trapping mechanism.
6. The apparatus as recited in Claim 4, further comprising a means on said base for observing and displaying the trapped condition of the micro-object.
7. An apparatus for trapping a micro-object, comprising:
a base;
a feed mechanism for placing a droplet containing micro-objects in a predetermined location on said base;

a gripping mechanism for gripping the micro-object in the droplet; and
a trapping mechanism for trapping the micro-object gripped by said gripping mechanism;

wherein said trapping mechanism includes a trapping means for trapping the micro-object, a moving means for moving said trapping means and an installation means for installing said trapping means on said moving means.

8. The apparatus as recited in Claim 7, further comprising a lifting means on said base for separating from the droplet the micro-object gripped by said gripping mechanism and trapped by said trapping mechanism.

9. The apparatus as recited in Claim 7, further comprising a means on said base for observing and displaying the trapped condition of the micro-object.

10. A method for trapping a micro-object, comprising the steps of:
placing a droplet containing micro-objects in a predetermined location;
gripping the micro-object in the droplet;
trapping the micro-object being gripped; and
separating the micro-object being trapped from the droplet.

11. The method as recited in Claim 10, further comprising observing and displaying at least said steps of gripping, trapping and separating.